

80/292/RVC

RESULT OF VOTING ON CDV

| | Project number: IEC 61174 ed.2 | Reference number of the CDV 80/278/CDV | | | | | | | |
|---|------------------------------------|--|--|--|--|--|--|--|--|
| İ | IEC/TC or SC | Date of circulation | | | | | | | |
| TC 80 2001-03-02 Fitle of the TC or SC concerned | | | | | | | | | |
| Maritime navigation and radiocommunications equipment and systems | | | | | | | | | |
| Manufic Havigation and radiocomman | noations equipment and | oyotomo | | | | | | | |
| | | | | | | | | | |
| Title of the committee draft: Maritime navigation and radiocommunand information system (ECDIS) - Operand required test results. | | | | | | | | | |
| The above-mentioned document was circulated to N as an FDIS (or publication as a Technical Specification) | | st that voting take place for approval for circulation | | | | | | | |
| Voting results | | | | | | | | | |
| see printout attached | | | | | | | | | |
| Comments received – see annex ¹ | | | | | | | | | |
| In the case that the approval criteria for acceptan | • | 2004 02 24 | | | | | | | |
| The committee draft for vote (CDV) will b | | | | | | | | | |
| DECISION OF THE CHAIRMAN (in cooperation with met or in the case of a draft Technical Specification of | | the approval criteria for acceptance have not been | | | | | | | |
| b The committee draft for vote (CDV) will be | e published as a Technical Speci | fication or Report by (date) | | | | | | | |
| c A revised committee draft will be circulate | ed as a committee draft for vote (| CDV) by (date) | | | | | | | |
| d A revised committee draft will be circulate | ed for comment by (date) | | | | | | | | |
| e | e discussed at the next meeting | (date) | | | | | | | |
| NOTE — In the case of a proposal b, c or d made Office with copy to the secretary in writing within 2 m | | | | | | | | | |
| Name or signature of the Secretary | Name or signat | ure of the Chairman | | | | | | | |
| M. A. Rambaut U. K. | Dr A Norris | | | | | | | | |
| | | | | | | | | | |

to be collated on Form 8C and annexed.

ANNEX A

Result of Voting on CDV - Document 80/278/CDV

Project: IEC 61174 Ed.2

Maritime navigation and radiocommunication equipment and systems - Electronic chart display and information system (ECDIS) - Operational and performance requirements, methods of testing and required test results

Circulation Date: 2000-09-01 Closing Date: 2001-01-31

| Country | Status | Sent | Received | Vote | Comments |
|----------------|--------|------------|------------|------|----------|
| Australia | 0 | 2001-01-05 | 2001-01-05 | Y | Y |
| Belgium | Р | 2001-01-05 | 2001-01-05 | Y | - |
| Canada | Р | 2001-01-31 | 2001-01-31 | Α | - |
| China | Р | 2001-01-19 | 2001-01-19 | Y | - |
| Denmark | Р | 2001-01-24 | 2001-01-24 | Α | - |
| Finland | Р | 2001-01-26 | 2001-01-26 | Y | - |
| France | Р | 2001-01-18 | 2001-01-18 | N | Y |
| Germany | Р | 2001-01-12 | 2001-01-12 | Υ | Y |
| Greece | 0 | 2001-01-30 | 2001-01-30 | Υ | - |
| Ireland | 0 | 2001-01-30 | 2001-01-30 | Y | - |
| Italy | Р | 2000-12-11 | 2000-12-11 | Υ | - |
| Japan | Р | 2001-01-25 | 2001-01-25 | Υ | Y |
| Netherlands | Р | 2001-01-29 | 2001-01-29 | Υ | - |
| Norway | Р | 2001-01-22 | 2001-01-22 | Y | Y |
| Portugal | - | 2001-01-30 | 2001-01-30 | Α | - |
| Russian Fed. | Р | 2000-12-06 | 2000-12-06 | Υ | Y |
| Spain | 0 | 2001-01-26 | 2001-01-26 | Y | - |
| Sweden | Р | 2001-01-30 | 2001-01-30 | Y | - |
| U.S.A. | Р | 2001-01-18 | 2001-01-18 | Υ | Y |
| United Kingdom | Р | 2001-01-26 | 2001-01-26 | Y | Y |

| | | Approval Criteria | Result |
|--------------------------------|------------------------|-------------------|----------|
| P-members voting: 13 | | | |
| | | | |
| P-members in favour: 12 = 92 % | | >= 67% | APPROVED |
| Total votes cast: 17 | Total against: 1 = 6 % | <= 25% | APPROVED |
| Final Decision: | | | APPROVED |

NOTES

- 1 Vote: Does the National Committee agree to the circulation of the draft as a FDIS: Y = In favour; N = Against; A = Abstention.
- 2 Only votes received before the closing date are counted in determining the decision. Late Votes: (0).
- 3 Abstentions are not taken into account when totalizing the votes.
- 4 P-members not voting: Egypt; Romania; (2).

80/292/RVC

Annex

3

| Date | Document |
|------------|------------|
| 2001-02-22 | 80/278/CDV |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|---|---|---|
| AU | | | General | The general form of IEC 61174 is to quote the relevant statement from the IMO Performance Standard and then to provide expanded comments, requirements or clarifications regarding testing. In the proposed text for Annex H, it is apparent that the original text of IMO A.817 (as amended) has been adjusted in a number of places. This can be justified in instances where the IMO use of "should" is more appropriately translated in IEC terms as "shall". Also, Appendix 7 of A.817 (ECDIS Performance Standard) begins with the statement: Whenever in this appendix reference is made to provisions of the Annex related to ECDIS, ECDIS should be substituted by RCDS, SENC by SRNC and ENC by RNC, as appropriate. Accordingly, it is justified to make such replacements. | Australia proposes that it would be better to employ the term "ECDIS operating in the RCDS mode" or its variants in appropriate places, rather than by relying on the word ECDIS alone. It is Australia's view that in general, every attempt should be made to retain the form of the original baseline text as drawn from the IMO Performance Standard. This is because to do otherwise is likely to lead to contradiction, ambiguity or inconsistency between the intended requirements of the IMO and those subsequently stipulated by the IEC. If interpretation is required, then this should be provided by way of a clarification statement, rather than by amending the baseline text. Australia's specific comments below are intended to follow this principle. | Agreed - text to be inserted where appropriate |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|--|--|---|
| AU | | (cont) | General | However, the introductory statement made in the IMO text is also an acknowledgment that the RCDS mode of operation of ECDIS is a valid, IMO-endorsed secondary or subsidiary mode of operation separate from, but closely associated with ECDIS used in its primary mode of operation. As such, this distinction needs to be preserved. Potential confusion will be introduced if <i>RCDS</i> is simply replaced by the word <i>ECDIS</i> in the text of Annex H. It effectively devalues the status of the RCDS mode of operation and at the same time introduces inconsistency and potential confusion when compared to the text of IMO Resolution A.817(19) (as amended). | | Agreed - see above |
| France | | | General | FNC would like to have a clear separation between hardware and software certification | | Rejected -not considered practical as a system test is deemed necessary |
| GB | | | | It has been known for some time that a small number of additional tests are required to check the correct processing of ENC data. Some of these tests use data in the existing test data set. Other tests use data included in Test Data Set Edition 2. It would appear sensible to include these tests in IEC61174 Edition 2. The tests in question are: | | Agreed - see clause 6.8 |
| Japan | 1 | 4th para. | EDITORIAL | new techniques in equipments and systems, | new techniques in <u>equipment</u> and systems, | Agreed |
| US 1 | 3.1.17 | | Technical | Each hydrographic office will produce an RNC test data set consisting of selected RNCs from their respective portfolios. | Delete: "The specific requirements are listed in H.18." Append: "The government-authorized hydrographic office responsible for producing RNCs for a given area of interest will provide the corresponding RNC test data set." | Agreed in principle - actual wording conforms to clause H 17.1.1 |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|---|--|---|
| Japan | 3.1.5 | | EDITORIAL | degrade reduce the information contents of | degradation reduction of information quantity or quality | Agreed in principal - compromise text used retaining "degrade" as IMO text but with clarification |
| Japan | 3.2 | EPFS | EDITORIAL | Electronic position fixing system | Insert a hyphen between position and fixing | Agreed |
| US 2 | 4.6.3.1 | | Editorial | Missing reference. | Append: "6.8.13" to references. | Agreed |
| US 3 | 4.10.4.3 | | Editorial | Missing reference. | Insert: "6.7.1h and" in references. | Rejected but re-worded to clarify. Also, removed reference to "navigational elements" from clause 6.7.1a. |
| US 4 | 4.10.6.1 | .2 | Technical | It should not be required that the system redundantly record information that does not change within the one-minute interval specified. | Add IEC clarification: "ENC source, edition, date, cell and update history need only be recorded initially and when the data changes." | Agreed |
| US 5 | 4.13.1 | | Editorial | Clarify reference. | Append: "a and b" to reference "6.8.17". | Agreed |
| US 6 | 4.13.2 | | Editorial | Clarify reference. | Append: "c" to reference "6.8.17". | Agreed |
| Japan | 5.2 | Note 2, last sentence | EDITORIAL | Operation of this feature shall be clearly indicated. | Operation of this feature shall be clearly indicated. Make shall upright | Agreed |
| US 7 | 5.3.3 | | Technical | Many systems already display the required information in separate windows that may be displayed simultaneously. | Append IEC clarification: "All of the listed general information must be available for simultaneous display. It is not necessary to accomplish this using a single "Standard Legend" window." | Agreed |
| DE 1 | 5.5.1 | | Editorial | "Other symbols" in addition to the Presentation Library shall use colours in accordance to S-52 appendix 2 / 2.3.1(B). The last sentence of clause 5.5.1 should be supplemented | In addition to the Presentation Library, other symbols may be used, using colours in accordance with S-52 appendix 2 / 2.3.1(B). | Agreed |
| DE 2 | 5.9 | | Editorial | The colours of the mariner's information panel shall deviate from the colours of the presentation library. The last sentence of clause 5.9 should be supplemented. | A mariner's information panel may use clearly visible colours deviating from the presentation library which do not detract from the chart display in any of the five mandatory colour tables. | Agreed |
| US 8 | 5.9 | 4th para. | Technical | The existing IEC clarification implies that it would be acceptable for a moveable window to remain in the chart display area. | Replace: "moved or removed from the display" with "removed or moved from the chart display area" | Agreed |
| DE 3 | 5.10.3 | | Editorial | Last sentence not <u>Equivilent</u> , the right wording is Equivalent | Equivalent suitable portable media is acceptable. | Agreed |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|--|--|---|
| DE 4 | 6.2 | | Technical | There is no interface test described in IEC 61174 – to ensure the compatibility with equipment to be connected, it is proposed to add following paragraph. | Test the digital inputs and outputs of system interface according to the tests described by the relevant interface standards. | Agreed and added new paragraph to clarify using other wording |
| US 9 | 6.2 | | Editorial | Missing references. | Append: "/ H.6.3.1 / H.12" to references | Agreed |
| Norway | 6.5.1 c) | | Technical | The test presuppose that the symbol magenta "?" can be disabled. The test does not correspond to a given requirement. | Delete the sentence: "Check that display of the symbol can be disabled." | Agreed |
| DE 5 | 6.6 | | Editorial | a) move of "-transformation between a local datum and WGS-84" to new paragraph c) with the following wording: | New paragraph c: c) Check that the system is able to perform transformations between local datum and WGS-84 and from WGS-84 to local datum | Rejected - no need to transform back |
| | | | | b) calculate and display both a rhumb line and great circle line according to test scenario 1 of annex J I and | Replace "J" by "I" | Agreed |
| US 10 | 6.6 | a) | Editorial | The test for rhumb line and great circle calculations is contained in subparagraph b. | Delete: "rhumb line and great circle" | Rejected - to be addressed in a future issue |
| US 11 | 6.6 | b) | Editorial | Correct reference. | Replace: "annex J" with "annex I" | Agreed |
| Norway | 6.6 b) | | Technical | It is specified that this test shall be carried out using the scale supporting the data, i.e. not overscaled. No data is provided in the TDS for conducting the test, i.e. the test may be done using a lat./lon. grid only. | Delete the sentence: "This test shall be carried out using the scale supported by the data, i.e. not overscaled." | Rejected - however removed "chart" in previous paragraph to clarify |
| DE 6 | 6.7.1 | | Editorial | Additional information what type of information should be checked to ensure sufficient size of characters. | g) Using a sample of text for presentation in the chart for manual updates, mariners notes and pick reports, check that the height of upper-case characters is not less than 3,5 mm. | Rejected - paragraph is too specific |
| US 12 | 6.7.1 | | Editorial | Missing reference. | Insert: "4.10.4.3 /" in references | Agreed - but ammended consistent with US 3 |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|--|--|---|
| DE 7 | 6.7.3.1 | b) | Technical | h) The test procedure should be supplemented with a test of the grey level (BKAJ2) of the display unit for the tables Day-black background, dusk and night. It is proposed to add this test under existing paragraph a) 5) as new paragraph a) 6). | Check that a screen provided by the manufacturer with colour BKAJ2 can be measured according to the following list Day-black background 1,6 cd/m² Day whiteback 1,12 cd/m² dusk 0,144 cd/m² night 0,05 cd/m² within of 20 % of the specified luminance value | Rejected - deferred to a future edition. Test not yet proven. |
| DE 8 | 6.7.3.2 | b) | Technical | The test procedure should be supplemented with a test of the absolute grey level (BKAJ2) of the display unit for the Table Day-black background, dusk and night. It is proposed to add this test under existing paragraph a) 6) as new paragraph a) 7). | Check that a screen provided by the manufacturer with colour BKAJ2 can be measured according to the following list Day-black background 1,6 cd/m² Day whiteback 1,12 cd/m² dusk 0,144 cd/m² night 0,05 cd/m² within of 20 % of the specified luminance value | Rejected - deferred to a future edition. Test not yet proven. |
| Norway | 6.7.3.2 b) 4) | | Technical | The clause refers to colour differentiation test diagrams in S-52 appendix 2, annex A, part 3, section 4.1. The correct reference is S-52 appendix 2, annex A.6. | Change to the correct reference. | Agreed |
| US 13 | 6.7.5 | 3rd para. | Technical | The existing test implies that it would be acceptable for a moveable window to remain in the chart display area. | Append: "from the chart display area" | Agreed |
| US 14 | 6.8.1 | | Technical | Existing wording implies only manual entry of initial position is allowed. Many systems may provide automatic initialisation of position. | Replace: "Re-enter the initial latitude/longitude position" with "Ensure that the initial latitude/longitude position is entered" | Agreed |
| DE 9 | 6.8.5 | b) | Editorial | In reflection to S-52 Appendix 2 / 2.3.1 (B) other symbols in addition to the Presentation Library shall use colour orange (colour token NINFO). The first sentence of b) should be supplemented. Change "symbols" to "objects", this change should clarify that this test does not handle symbols for manual updates. | If available select three different objects using colour orange (colour token NINFO), check that these may be positioned at user-defined locations on the display. | Rejected - however removed brackets from "symbols" and deleted "objects" in existing paragraph b to clarify |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|---|--|---|--|
| US 15 | 6.8.6 | b) | Technical | Existing wording implies necessity to display or "select" a single ENC cell. Some systems may not provide this capability. | Replace: "Select a less detailed navigation purpose cell" with " "Select an area covered by a less detailed navigational purpose cell" | Rejected |
| DE 10 | 6.8.8 | b) | Editorial | The value of the selected depth contour should be between two existing depth lines. The paragraph should be supplemented. | Select a depth contour value not contained in the SENC but between two existing depth lines, which are available in SENC. | Rejected - unecessary clarification |
| GB | 6.8.10 d | | Technical | | Select an example of a note encoded using TXTDSC (Text description). Check that the note can be easily read. | Agreed |
| GB | 6.8.10 e | | Technical | | Select an example of PICREP (Picture Representation). Check that it can be displayed in a manner that does not effect the user's night vision. | Agreed |
| GB | 6.8.10 f | | Technical | | Select an example of Tidal Stream Panel Information (TSPAD) and Prediction by Harmonic Methods (TS_PRH). Check that in both cases the data can be easily read and is logically presented. | Agreed |
| GB | 6.8.10 g | | Technical | | Select an example of an update that comes into effect at a future date. Check that: a. the user is given advance warning of the future change, b. that during voyage planning, the update is displayed if it comes into effect during the dates specified for the voyage. | Agreed |
| GB | 6.8.15.1 g | | Technical | | Load a cell cancel update. Check that the cancelled cell is no longer available. | Agreed - however changed "cell cancelled" to "cell-cancellation" |
| DE 11 | 6.8.16 | d) | Editorial | The test in paragraph does not match with item specified in the headline. Move subclauses. | Move paragraph to 6.9.2 Route planning – as new paragraph .6 and renumber the following paragraphs and to 6.9.3 Route Monitoring as new paragraph .8. | Agreed in principal but reworded original clause 6.8.16 d. Added to clauses 6.9.2 and 6.9.3. |
| DE 12 | 6.8.17 | c) | General | The selftest-, alarm functions etc. and their tests needed are already covered by relevant paragraphs of IEC 60945. Add new wording. | New wording of c): Refer for selftest functionality to relevant section of IEC 60945. | Agreed however added text to existing paragraph |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|---------------------------|--|--|---|
| US 16 | 6.8.17 | | Editorial | Inappropriate reference. | Delete: " / 4.13.1 / 4.13.2" from references | Agreed |
| Norway | 6.9.2 | a) .4 | Technical | The test specifies that at least one leg shall cross the boundary of a prohibited area. The term "prohibited area" is not defined. Testing of legs that cross the boundary of geographical areas for which special conditions exist is specified in clause 6.9.2.a) .4. | Delete subclause 6.9.2 a) .4 | Rejected - see Annex A addressing Standard Display |
| US 17 | 6.9.2 | a) .6 | Editorial | 5-second refresh applies to route monitoring mode only. | Delete: "Set to test the 5 s maximum redraw" | Agreed |
| US 18 | 6.9.2 | e) | Editorial | Correct reference. | Replace: "annex J" with "annex I" (Note: there are two instances) | Agreed |
| Japan | 6.9.2.9 | | EDITORIAL | 0,5 nautical mile to | 0,5 nautical miles to miles | Agreed |
| DE 13 | 6.9.3 | a).4 | Editorial | The first waypoint of a route is not named "waypoint 1" in any case. Revise the wording. | .4 carry out route monitoring using the selected routes and starting at the first waypoint of the route. | Agreed |
| US 19 | 6.9.4 | | Editorial | Inappropriate reference. | Delete: " / 4.10.5.14" from references | Agreed |
| US 20 | 6.9.4 | c) | Technical | See proposed change to 4.10.6.1. | Append: "at least initially and for each data change" | Agreed |
| US 21 | 6.9.6 | | Editorial | Missing reference. | Append: "/ H.15.2" to references | Agreed |
| Japan | В | | EDITORIAL | Own ship Past track with time marks for primary track Past track with time marks for secondary track | and apply indents, e.g. for 1.1, 1.2, 5.1, 5.2, 8.1, and 8.2. | Agreed |
| Japan | D | | EDITORIAL | para. 4.10.5.3 | 4.10.5.4 There are two 4.10.5.3s. | Agreed |
| Japan | D | | EDITORIAL | 4.10.4.6 Alarm Exceeding off track limits | 4.10.4.6 Alarm Exceeding off track-limits Put a hypen for off track | Agreed |
| Japan | E | E.1 | EDITORIAL | the navigational used on | the navigational symbols used on (add symbols). | Agreed |
| RU | E 2.3 | Table 3.2.2 | Editorial | The Symbols of AIS shall be agreed with the results of the work WG-8A. | | Agreed - footnote added from 60936-1 |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|--|--|---|
| RU | E 2.4 | Table 3.2.2 | Editorial | The Symbols of AIS shall be agreed with the results of the work WG-8A. | | Agreed - footnote added from 60936-1 |
| RU | E 2.5 | Table 3.2.2 | Editorial | The Symbols of AIS shall be agreed with the results of the work WG-8A. | Page 38 2.3 2.4 2.5 | Agreed - footnote added from 60936-1 |
| DE 14 | E | E.2.2 | General | Symbols: Target tracking – AIS reported targets regarding symbols 2.3 up to 2.5. IMO and IEC TC 80 currently start a new work item to establish new AIS symbols for navigational equipment. For this it is proposed to insert a note to clarify that current symbols are placeholders and new symbols are under development. | Note: Unified symbols for navigational equipment are under development and will supersede these symbols. | Agreed - footnote added from 60936-1 |
| GB | Annex F | | Editorial | During the validity of IEC61174 Edition 2.0, ENCs conforming to S-57 Edition 3.1 (i.e. Edition 2.0 ENCs) will be made available and will slowly supersede ENCs conforming to S-57 Edition 3.0 (i.e. Edition 1.0 ENCs). | Delete NOTE which appears after F.4.2. Replace with a new note at the start of the Annex. "The latest version of the Test Data Set is available from the International Hydrographic Organization at http://www.iho.shom.fr | Agreed |
| GB | F.2.1 f | | Technical | | After INFORM add TXTDSC and PICREP. | Agreed |
| GB | F.3.1 h | | Technical | | An example of a cell cancellation update. | Agreed |
| Japan | G.4.2.2 | G.4.2.2 1st line | EDITORIAL | shall be in accordance | <u>shall</u> be in accordance | Agreed |
| US 22 | G.7.6 | b) | Editorial | Correct reference. | Replace: "annex J" with "annex I" | Agreed |
| Japan | G.7.9.2 | G.7.9.2 c) 1) | EDITORIAL | least one leg of the | at least one leg of the | Agreed |
| AU | Н | Intro- ductory Note | E | Appendix 7 of A.817 has 15 clauses, yet the note refers only to <i>clauses 1 through</i> 4. This appears to be a typographical error. | The paragraphs of appendix 7 of A.817 indicate whether the paragraphs of clauses 1 through 4 apply to the RCDS mode. should be amend to read clauses 1 through 15 | Agreed - see US 23 |
| AU | Н | Intro- ductory Note | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read "The primary function of the ECDIS operating in the RCDS mode is to contribute to safe navigation." | Agreed |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|--|--|--|
| France | Н | | Technical | It is not clearly indicated that only ENC is mandatory and has to be taken into account by ECDIS standard. RNC shall be considered as additional non-HO. Another point has to be clearly stated: when RNC data are given on a display, it has to be indicated "non-ENC area" | | Agreed - Add new clause H.1.9 from 4.1.9 Rejected - indication is in H 3.11 |
| GB | H | | General | This is not the text which was agreed by MT1 at its last meeting. I agree that replacing clauses such as "Paragraph applies to RCDS" by the full text of the paragraph in question is very useful and the authors are to be congratulated on this move. However, I cannot support changes to the actual IMO text, such as changing "RCDS" to "ECDIS"; "ECDIS, when operating in the RCDS mode"; "Use of ECDIS"; "RCDS mode"; "When operating in RCDS mode, ECDIS"; etc. I do not believe that this simplifies the text, and in certain instances it amends the meaning of the IMO text which was itself the result of long debate at IMO. The text should revert to the published IMO text (Appendix 7 of IMO Resolution A. 817) as agreed by MT1. If the meaning of the IMO text is not clear, the text itself should not be amended but an IEC clarification added, as has been done elsewhere in IEC61174. See detailed proposals below. The wording "Revert to intended IMO text" is used where the IMO text says "Paragraph applies to RCDS" but the full text appears in Annex H | | Agreed Use "ECDIS in RCDS mode" where appropriate |
| GB | Н | Introductory NOTE | Editorial | "clauses 1 through 4 apply to the RCDS mode" implies that Annex H only has 4 clauses | Amend to read "clauses 1 through 15 apply" | Agreed |

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|-----------------------|----------------------|----------------------------|--|---|--|---|
| US 23 | Н | Introductory Note | Editorial | Appendix 7 of A.817 has 15 clauses, yet the note refers only to clauses 1 through 4. This appears to be a typographical error. | Replace: "sub clauses of H.1 through H.15" with "sub clauses H.1 through H.15" | Agreed |
| | | | | | Replace: "clauses 1 though 4" with "clauses 1 though 15" | |
| GB | H.1.1 | | Technical | | Revert to IMO text, i.e. replace ECDIS by RCDS. Add IEC clarification, "In the clauses of this annex "RCDS" means "ECDIS operating in the RCDS mode." With the addition of this clarification, the substitution of ECDIS by RCDS, as required by IMO, makes sense in all clauses | Rejected - achieved by other means |
| US 24 | H.1.1 | | Technical | The use of the term "ECDIS" alone can cause confusion. The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| AU | H 1.2 | | Е | The text of A.817 refers to <i>folio</i> rather than <i>portfolio</i> of up-to-date paper charts | amend to read folio | Agreed |
| US 25 | H.1.2 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "When operating in the RCDS mode, ECDIS shall" with "ECDIS operating in the RCDS mode shall" | Agreed |
| | | | Technical | The term "portfolio" is mistakenly used. | Replace: "portfolio" with "folio" | Agreed |
| GB | H.1.3 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 26 | H.1.3 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS, when operating in the RCDS mode" with "ECDIS operating in the RCDS mode" | Agreed |
| AU | H.1.4 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend ECDIS to read "ECDIS operating in the RCDS mode" | Agreed |
| GB | H.1.4 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 27 | H.1.4 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| GB | H.1.5 | | Technical | | Revert to intended IMO text. Add IEC clarification, "In this clause "electronic navigational chart" means "raster navigational chart" | Agreed but clarification for raster included in actual text |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|---|---|---|
| US 28 | H.1.5 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "When operating in the RCDS mode, ECDIS shall" with "ECDIS operating in the RCDS mode shall" | Agreed |
| AU | H.1.6 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend ECDIS to read: "ECDIS operating in the RCDS mode" | Agreed |
| GB | H.1.6 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| AU | H.1.7 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend ECDIS to read: "ECDIS operating in the RCDS mode" | Agreed |
| GB | H.1.7 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 29 | H.1.7 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| GB | H.1.8 | | Technical | | Revert to IMO text | Rejected - achieved by other means |
| US 30 | H.1.8 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS, when operating in the RCDS mode" with "ECDIS operating in the RCDS mode" | Agreed |
| AU | H.2.1 | | T | It seems unwise and inconsistent to modify the definitions provided in A.817. It might be better to add a clarifying statement instead; for example: "navigation information system means ECDIS operating in RCDS mode" | amend to read: Raster Chart Display System (RCDS) means a navigation information system displaying RNCs with positional information from navigation sensors to assist the mariner in route planning and route monitoring, and if required, display additional navigation-related information. Note: In the context of this Annex, navigation information system means ECDIS operating in the RCDS mode. | Agreed |
| GB | H.2.1 | | Technical | | Revert to IMO text | Rejected - achieved by other means |
| US 31 | H.2.1 | | Technical | Do not alter the IMO definition. | Delete: "mode" after (RCDS) | Agreed |
| | | | Technical | Change modification of IMO verbiage to IEC clarification. | Add IEC clarification: "In the context of this Annex, navigation information system means ECDIS operating in the RCDS mode." | |
| GB | H.2.4 | to-H.1.2.5 | Editorial | | Should read H.2.4 - H. 2.5 | Agreed |
| US 32 | H.2.4 | | Editorial | Correct reference. | Replace: "H.1.2.5" with "H.2.5" | Agreed |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|--|--|---|
| AU | H.2.4 - H.1.2.5 | | Е | Typographical error - should read <i>H.2.4</i> - <i>H.2.5</i> | amend to read: <i>H.2.4 - H.2.5</i> | Agreed |
| AU | H.2.6 | | Т | In the context of Annex H, this should refer to RCDS rather than ECDIS. | amend ECDIS to read: "ECDIS operating in the RCDS mode" | Rejected - achieved by other means |
| GB | H.2.6 | | Technical | | Revert to intended IMO text. The IEC clarification describes the current situation regarding the status of definitions | Agreed |
| US 33 | H.2.6 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Rejected - achieved by other means |
| AU | H.3.1 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: ECDIS operating in the RCDS mode shall be capable of displaying all SRNC information. (See H.17.2.1.) | Agreed |
| GB | H.3.1 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 34 | H.3.1 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "When operating in the RCDS mode, ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| | | | Editorial | Missing reference. | Append: "and H.17.4.2" to references | |
| US 35 | H.3.2 | .1 | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "the RCDS mode standard display" with "the ECDIS operating in the RCDS mode standard display" | Rejected - achieved by other means |
| AU | H.3.2.1 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: the ECDIS operating in the RCDS mode standard display consisting of RNC and its updates, including its scale, the scale at which it is displayed, its horizontal datum, and its units of depths and heights; and (See H.17.2.1 and H.17.4.2.) | Rejected - achieved by other means |
| GB | H.3.2.1 | | Technical | | Revert to IMO text | Agreed |
| AU | H.3.3 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. There is also no requirement to further clarify which standard display is being referred to. | amend to read: ECDIS operating in the RCDS mode shall present the standard display at any time by a single operator action. | Agreed except in clarification |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|---|---|---|
| GB | H.3.3 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 36 | H.3.3 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "When operating in the RCDS mode, ECDIS shall present the RCDS standard display" with "ECDIS operating in the RCDS mode shall present the standard display" | Agreed |
| | | | Editorial | No reference. | Append: "(See H.17.5.1f)" as reference | |
| AU | H.3.4 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend text to read: When a RNC is displayed on ECDIS operating in the RCDS mode, it shall provide an indication advising the mariner if a more detailed (larger scale) RNC is available for the displayed area. (See H.17.5.2c.) | Agreed |
| GB | H.3.4 | | Technical | | Revert to IMO text | Rejected - achieved by other means |
| US 37 | H.3.4 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| AU | H.3.5 | | Т | The text should repeat the original A.817 reference in order to maintain consistency. there is no benefit to deleting RCDS from the IMO wording. | amend to read: It shall be easy to add to, or remove from, the RCDS display any information additional to the RNC data, such as mariner's notes. It shall not be possible to remove any information from the RNC. (See H.17.5.1a) | Agreed |
| GB | H.3.5 | | Technical | | Revert to IMO text | Rejected - achieved by other means |
| US 38 | H.3.5 | | Technical Editorial | The term "display" alone is inconsistent with the original IMO verbiage. Missing reference. | Replace: "display" with "RCDS display" Append: "and H.17.5.1e" to references | Agreed |
| Japan | H.3.8 | Н | EDITORIAL | Degredation shall be understood as degredation in information | Degradation shall be understood as degradation in information | Agreed |
| AU | H.3.8 | | E | Spelling error: degredation | amend to read: degradation | Agreed |
| US 39 | H.3.8 | | Editorial | Clarify reference. | Append: ".2" to reference "H.17.5.9" | Agreed |
| US 40 | H.3.8 | | Technical | Consistent with suggested test data set definition. See proposed change to 3.1.17. | Replace: "chart or charts contained in the RNC test data set provided by the government-authorized hydrographic offices" with "RNC contained in the RNC test data set" | Rejected - however wording in question was deleted as inappropriate |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|---|---|---|---|
| US 41 | H.3.8 | 2nd para. | Editorial | Misspelling. | Replace:" Degredation" with "degradation". (Note: there are two instances) | Agreed |
| AU | H.3.9 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: ECDIS operating in the RCDS mode shall provide a means of ensuring that the RNC and all updates to it have been correctly loaded into the SRNC. (See H.17.4.1a, H.17.5.9 and H.17.5.10.) | Agreed |
| GB | H.3.9 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 42 | H.3.9 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "When operating in the RCDS mode, ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| | | | Editorial | Missing reference. | Insert: "H.17.5.8" in references | |
| | | | Editorial | Clarify reference. | Append: ".1-2 to reference H.17.5.9" | |
| AU | H.3.10 | | E | Spelling error: authorized <u>hydrograhic</u> office | amend to read: hydrographic | Agreed |
| US 43 | H.3.10 | 2nd para. | Editorial Technical | Misspelling. Clarification of "hydrographic office" required. | Replace: "hydrograhic" with "hydrographic office providing the RNCs" | Agreed |
| US 44 | H.3.11 | | Editorial | Clarify reference. | Append: "a" to reference "H.17.2.1" | Agreed |
| | | | Editorial | Missing references. | Append: "H.17.6.2f and H.17.6.3g" to references | |
| AU | H.4.1 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. The addition of "S-61" as the relevant "IHO standard" does not follow the original IMO text and is not required since it is already included elsewhere as a normative reference. Relevant IHO standards are not quoted specifically in any other parts of annex H. | amend first paragraph to read: The RNC used in ECDIS operating in the RCDS mode shall be the latest edition of that originated by, or distributed on the authority of, a government authorised hydrographic office and conform to IHO standards. RNCs not on WGS-84 or PE-90 shall carry metadata (i.e., additional data) to allow geo-referenced positional data to be displayed in the correct relationship to SRNC data. (See H.17.2.1 and H.17.5.6.). | Agreed - however without clarification |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|---|---|--|
| GB | H.4.1 | | Technical | | Revert to IMO text. The reference to IHO standard S-61 should appear as an IEC clarification, as agreed at the MT1 meeting | Agreed - however without clarification |
| US 45 | H.4.1 | 1st Para. | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| | | | Technical | Make proper reference to IHO Standards. | Replace: "Standards (S-61)" with "IHO Standards" | |
| | | | Editorial | Missing reference. | Insert: "H.17.2.2" in references | |
| | | | Editorial | Clarify reference. | Append: "a" to reference "H.17.5.6" | |
| US 46 | H.4.1 | 3rd Para. | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| | | | Technical | Broaden the allowance for RNC indexes. | Replace: "graphical index" with "graphical or text index" | |
| US 47 | H.4.2 | | Editorial | No reference. | Insert: "(See H.17.2.1.)" as reference | Agreed |
| | | | Editorial | Correct references. | Replace: "H.1.4.3" with "H.4.4" | Agreed |
| | | | | | Replace: "H.1.4.8" with "H.4.8" | Agreed |
| | | | Technical | Clarify appropriate scale of ENC. | Add IEC clarification: "A part of the intended voyage is "not covered by ENC" unless a ENC of appropriate scale for safe route planning and route monitoring is available. Thus, for example, an area covered by ENCs of scale 1:200,000 or smaller would be considered "not covered by ENC" if a scale of 1:40,000 is required for safe navigation." | Agreed in principal - but moved to test in clause H.17.2.1 |
| US 48 | H.4.4 | | Technical | Narrow the scope of the IEC clarification for storage of updates. | Replace: "storage area" with "storage device" | Agreed |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|---|---|---|
| AU | H.4.5 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend first paragraph to read: ECDIS operating in the RCDS mode shall be capable of accepting official updates to the RNC data provided in conformity with IHO standards. These updates shall be automatically applied to the SRNC. By whatever means updates are received, the implementation procedure shall not interfere with the display in use. (See H.17.5.9.) | Agreed |
| GB | H.4.5 | | Technical | | Revert to intended IMO text. Note that this includes adding "IHO" before "standards" | Agreed |
| US 49 | H.4.5 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "When operating in the RCDS mode, ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| | | | Technical | Change wording to be consistent with suggested test data set definition and implementation. (See proposed changes to 3.1.17 and H.3.8.) | Replace "provided in conformity with Standards with "provided by government-authorized hydrographic offices" | Rejected - achieved by other means |
| AU | H.4.6 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: ECDIS operating in the RCDS mode shall also be capable of accepting updates to the RNC data entered manually with simple means for verification prior to the final acceptance of the data. They shall be distinguishable on the display from RNC information and its official updates, and not affect display legibility. (see H.17.5.10.) | Agreed |
| GB | H.4.6 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 50 | H.4.6 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "When operating in the RCDS mode, ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| AU | H.4.7 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend first paragraph to read: ECDIS operating in the RCDS mode shall keep a record of updates, including time of application to the SRNC. (See H.17.5.9 and H.17.5.10.) | Agreed |
| GB | H.4.7 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|---|--|---|
| US 51 | H.4.7 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| | | | Editorial | Clarify reference. | Append ".3" to reference "H.17.5.9" | |
| | | | Editorial | Inappropriate reference. | Delete: "and H.17.5.10" | |
| AU | H.4.8 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend first paragraph to read: ECDIS operating in the RCDS mode shall allow the mariner to display updates so that the mariner may review their contents and ascertain that they have been included in the SRNC. (See h.17.5.9 and H.17.5.10.) | Agreed |
| GB | H.4.8 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 52 | H.4.8 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| | | | Editorial | Clarify reference. | Append ".2" to reference "H.17.5.9" | |
| AU | H.5 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: ECDIS, operating in the RCDS mode shall provide | Agreed |
| GB | H.5 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 53 | H.5 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "When operating in the RCDS mode, ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| AU | H.6.1 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: Radar information or other navigational information may be added to the ECDIS display (operating in the RCDS mode). However, it shall not degrade the SENC information, and shall be clearly distinguishable from the SENC information. | Agreed - but used modified wording "RCDS display" |
| GB | H.6.1 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 54 | H.6.1 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency a variant of that term is appropriate here. | Replace: "ECDIS display" with "ECDIS display (operating in the RCDS mode)" | Agreed - but used modified wording |
| | | | Editorial | Correct reference. | Replace "H.17.5.8" with "H.17.5.7" | Agreed |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|---------------------------|---|---|---|
| AU | H.6.2 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend first paragraph to read: ECDIS operating in the RCDS mode and added navigational information shall use a common reference system. If this is not the case, an indication shall be provided. (See H17.5.1, H.17.5.6 and H.17.5.7.) | Agreed - but used modified wording |
| GB | H.6.2 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 55 | H.6.2 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed - but used modified wording |
| | | | Editorial | Inappropriate references. | Delete: "H.17.5.1" and "H.17.5.7" from references. | Agreed |
| | | | Editorial | Clarify references. | Append: "e and g" to reference "H.17.5.6" | Agreed |
| US 56 | H.6.3.1 | | Technical | Missing reference. | Insert: "6.2 and" in references | Agreed |
| AU | H.6.3.2 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: If the radar image is added to the ECDIS display (operating in the RCDS mode), the chart and the radar image shall match in scale and in orientation. (See H.17.5.7g.) | Agreed - but used modified wording "RCDS display" |
| GB | H.6.3.2 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 57 | H.6.3.2 | | Editorial | The term "ECDIS operating in the RCDS mode" provides consistency a variant of that term is appropriate here. | Replace: "ECDIS display" with "ECDIS display (operating in the RCDS mode)" | Rejected - achieved by other means |
| US 58 | H.6.3.4 | | Editorial | Missing reference. | Append: "and d" to references | Agreed |
| AU | H.7.2 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: ECDIS, operating in the RCDS mode shall provide for true motion mode. Other modes are permitted. (See H.17.5.3c.) | Agreed |
| GB | H.7.2 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 59 | H.7.2 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| US 60 | H.7.3 | | Editorial | Correct reference | Replace "H.17.5.3c" with "H.17.5.3b" | Agreed |
| US 61 | H.8.2 | | Editorial | No reference. | Append "(See H.17.4.1b and c.)" as references | Agreed |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|---|--|---|
| AU | H.8.4 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: ECDIS operating in the RCDS mode shall allow the mariner to select whether own ship is displayed in true scale or as a symbol. (See H.17.4.1b.) | Agreed |
| GB | H.8.4 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 62 | H.8.4 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| | | | Editorial | Correct reference | Replace "H.17.4.1b" with "H.17.4.1d" | |
| AU | H.9.1 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: ECDIS operating in the RCDS mode shall be capable of displaying information for: | Agreed |
| GB | H.9.1 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 63 | H.9.2 | | Editorial | Correct reference | Replace "6.7.5" with "H.17.4.4" | Agreed |
| AU | H.9.5 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend first paragraph to read: ECDIS operating in the RCDS mode shall be capable of displaying, simply and quickly, chart notes which are not located on the portion of the chart currently being displayed. (See S-61 3.4.2.18 and 3.4.2.19). (See H.17.4.4.) | Agreed |
| GB | H.9.5 | | Technical | | Revert to IMO text | Rejected - achieved by other means |
| US 64 | H.9.5 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "When operating in the RCDS mode, ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| AU | H.10.2 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: ECDIS operating in the RCDS mode shall be designed following ergonomic principles for user-friendly operation. (See H.17.6.2 and H.17.6.3.) | Agreed - but used modified wording |
| GB | H.10.2 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 65 | H.10.2 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS shall be designed following ergonomic principles for user-friendly operation in RCDS mode" with "ECDIS operating in the RCDS mode shall be designed following ergonomic principles for user-friendly operation" | Agreed - but used modified wording |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|---|--|---|
| US 66 | H.10.4.1 | | Editorial | Clarify reference. | Append: "c" to reference "H.17.6.2" | Agreed |
| US 67 | H.10.4.2 | | Editorial | Clarify reference. | Append: "d" to reference "H.17.6.2" | Agreed |
| US 68 | H.10.4.3 | | Editorial | Missing reference. Clarify reference. | Insert: " H.17.4.1b and" in references | Agreed |
| | | | | | Append: "d" to reference "H.17.6.2" | |
| US 69 | H.10.4.6 | | Editorial | Clarify reference. | Append: "a.6" to reference "H.17.6.2" | Agreed |
| US 70 | H.10.5.1 | | Editorial | Append: "d" to reference "H.17.6.2" | Append: "b" to reference "H.17.6.3" | Agreed |
| AU | H.10.5.2 | | Е | Internal references are wrong: H.1.10.4.6 and H.1.10.4.7. | amend references in both paragraphs to read: <i>H.10.4.6</i> and <i>H.10.4.7</i> | Rejected - achieved by other means. Revert to IMO wording. |
| GB | H.10.5.2 | | Editorial | | The internal references appear to be wrong | Agreed |
| US 71 | H.10.5.2 | 1st para. | Editorial | Correct references. Clarify references. | Replace: "H.1.10.4.6" with "H.10.5.5" | Rejected - achieved by other means. Revert to IMO wording. |
| | | | | | Replace: "H.1.10.4.7" with "H.10.5.15" | Rejected - achieved by other means. Revert to IMO wording. |
| | | | | | Append: "b and c" to reference "H.17.6.3" | Agreed |
| US 72 | H.10.5.2 | 2nd para. | Editorial | Correct references | Replace: "H.1.10.4.6" with "H.10.4.6" | Agreed |
| | | | | | Replace: "H.1.10.4.7" with "H.10.4.7" | |
| US 73 | H.10.5.5 | | Editorial | Clarify reference. | Append: "f.3" to reference "H.17.6.3" | Agreed |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|--|--|---|
| AU | H.10.5.6 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. The clarification statement should also reflect RCDS mode. Statement should also be gender neutral. | amend first paragraph to read: The ship's position shall be derived from a continuous positioning system of an accuracy consistent with the requirements of safe navigation. Whenever possible, a second independent positioning method of a different type shall be provided; ECDIS operating in the RCDS mode shall be capable of identifying discrepancies between the two systems. (See H.17.5.6.) amend clarification paragraph to read: The ECDIS operating in the RCDS mode shall have means to display the position from at least two positioning methods, to identify which method is being used, and to provide a means for the operator to select the method to be used. Secondary positioning methods could include dead reckoning. | Agreed |
| GB | H.10.5.6 | | Technical | | Revert to intended IMO text. The IEC clarification should also use "RCDS" | Rejected - achieved by other means |
| US 74 | H.10.5.6 | 1st para. | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| | | | Editorial | Clarify references. | Append: "a and b" to reference "H.17.5.6" | |
| US 75 | H.10.5.6 | 2nd para. | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|--|---|---|
| AU | H.10.5.7 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. The clarification that electronic positioning systems are implied should be provided as a clarification statement, rather than included in the baseline text. | amend first paragraph to read: ECDIS operating in the RCDS mode shall provide an alarm when the input from the position-fixing system is lost. ECDIS operating in the RCDS mode shall also repeat, but only as an indication, any alarm or indication passed to it from a position-fixing system. (See H.17.5.6.) add clarification paragraph: In this context, "position-fixing system" means an electronic position fixing system | Agreed |
| GB | H.10.5.7 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 76 | H.10.5.7 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. Use original IMO wording and add clarification for EPFS. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" Replace: "from an electronic position-fixing system" with "from a position-fixing system" Add IEC clarification: "In this context, "position-fixing system" means an electronic position-fixing system." | Agreed |
| | | | Editorial | Clarify references. | Append: "c and d" to reference "H.17.5.6" | |
| AU | H.10.5.8 | | Τ | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. The clarification statement should also reflect RCDS mode. | amend first paragraph to read: An alarm shall be given by ECDIS operating in RCDS mode if the ship, within a specified time or distance set by the mariner, is going to reach a critical point on the planned route. amend clarification statement to read: ECDIS operating in RCDS mode shall permit the mariner to define critical points and the time or distance at which an alarm shall be given. The words "to reach a critical point" shall be considered passing abeam of the critical point on the planned route. | Agreed in principal |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|---------------------------|---|--|--|
| GB | H.10.5.8 | | Technical | | Revert to intended IMO text. The IEC clarification should also use "RCDS" | Rejected - achieved by other means |
| US 77 | H.10.5.8 | 1st para. | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed in principal |
| | | | Editorial | No reference. | Append: " (See H.17.6.3f.4)" | |
| US 78 | H.10.5.8 | 2nd para. | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| AU | H.10.5.9 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. Internal Reference <i>H.1.4.1</i> is incorrect – should be <i>H.4.1</i> The relevance of other datums and their relationship to the RNC should be provided as a clarification statement, rather than by adding to the baseline text. it should also be clarified that 'data" means absolute position coordinates provided by an electronic positioning system. | amend to read: The ECDIS operating in RCDS mode shall only accept data referenced to the WGS-84 or PE-90 geodetic datum. ECDIS operating in RCDS mode shall give an alarm if the positional data is not referenced to one of these datums. (See H.4.1 and H.17.5.6.) add clarification statements: 1. The appropriate datum (WGS-84 or PE-90) shall be determined by the SRNC in use. Similarly, the alarms shall be given if the positional data is not referenced to the appropriate datum for the SRNC in use. | Rejected - confusing. Could be interpreted as contradictory. |
| | | | | | 2. "data" means coordinates defining absolute (as opposed to relative) position provided by an electronic positioning system. | Rejected - see GB comment |
| GB | H.10.5.9 | | Technical | | Revert to IMO text. Add IEC clarification agreed at MT1 meeting, "In the first line, "data" refers to positional data, that is data from an electronic position fixing system" | Agreed |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|---|--|---|
| US 79 | H.10.5.9 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "When operating in the RCDS mode, ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| | | | Technical | Use original IMO wording. | Delete: "as appropriate for the SRNC in use" Delete: "to that same geodetic datum as the SRNC in use" | Agreed |
| | | | Technical | Add clarification for the appropriate SRNC in use. | Add IEC clarification: "The appropriate datum (WGS-84 or PE-90) shall be determined by the SRNC in use. Similarly, the alarms shall be given if the positional data is not referenced to the appropriate datum for the SRNC in use." | Rejected - see AU comment |
| | | | Technical | Add clarification of the term "data". | Add IEC clarification: The term "data" means coordinates defining absolute (as opposed to relative) position provided by an electronic position-fixing system. | Rejected - see AU comment |
| | | | Editorial | Inappropriate reference. | Delete: " H.1.4.1 and" from references. | Agreed |
| | | | Editorial | Clarify reference. | Append: "6a and e" to reference "H.17.5" | Agreed |
| US 80 | H.10.5.10 | | Editorial | Inappropriate references. | Delete: "H.17.5.5" from references | Agreed |
| | | | Editorial | Clarify reference. | Append: "f.5 and .6" to reference "H.17.6.3" | |
| | | | Editorial | Inappropriate annex reference. | Delete: "and annex B" from references | |
| US 81 | H.10.5.11 | .1 | Editorial | Inappropriate reference. | Delete: "H.17.5.5" from references | Agreed |
| US 82 | H.10.5.12 | | Technical | Existing text is applies to vector rather than raster data. Missing reference. Inappropriate reference. | Replace: "(symbol or position)" with ", line or boundary of a feature entered by the mariner" | Rejected - used IMO text and clarification |
| | | | | | Insert: "H.17.5.1b and" in references | Agreed |
| | | | | | Delete: "and H.17.5.5" to references | Agreed |
| US 83 | H.10.5.13 | | Editorial | Missing reference. | Append: " H.17.6.4" to references | Agreed |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|--|---|---|
| AU | H.10.5.14 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: ECDIS operating in RCDS mode shall allow the user to manually align the SRNC with positional data. This can be necessary, for example, to compensate for local charting errors. (See H.17.5.6f.) | Agreed |
| GB | H.10.5.14 | | Technical | | Revert to IMO text | Rejected - achieved by other means |
| US 84 | H.10.5.14 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "When operating in the RCDS mode, ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| AU | H.10.5.15 | | Т | While intended to improve the English interpretation, the proposed words amend the baseline text significantly. If clarification is required, it should be provided as a clarification statement, rather than by amending the baseline text. | amend to read: It shall be possible to activate an automatic alarm when the ship crosses a point, line, or is within the boundary of a mariner-entered feature within a specified time or distance. (See H.17.5.1b, H.17.5.4 and H.17.6.3.) | Agreed |
| GB | H.10.5.15 | | Technical | | Revert to IMO text | Agreed |
| US 85 | H.10.5.15 | | Technical | Use original IMO wording. (Add IEC clarification if absolutely necessary.) | Replace: "When operating in RCDS mode, ECDIS shall give an alarm if the ship, within a specified time or distance set by the mariner, is going to cross a point, line or boundary of a feature entered by the mariner and specified for an automatic alarm in H.1.10.4.7." with "It shall be possible to activate an alarm when the ship crosses a point, line or is within the boundary of a mariner-entered feature within a specified time or distance." | Agreed |
| | | | Editorial | Correct reference. | Replace: "H.1.10.4.7" with "H.10.4.7" | |
| | | | Editorial | Clarify references. | Replace "and H.17.6.3" with "H.17.6.3c and d" | |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|---|--|---|
| AU | H.10.6.1 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | Amend to read: ECDIS operating in RCDS mode shall store and be able to reproduce certain minimum elements required to reconstruct the navigation and verify the official database used during the previous 12 hours. The following data shall be recorded at one-minute intervals: (See H.17.6.4.) | Agreed |
| | | | | | .1 to ensure a record of own ship's past track: time, position, heading, and speed; and | |
| | | | | | .2 to ensure a record of official data used: RNC source, edition, date, cell and update history. | |
| GB | H.10.6.1 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 86 | H.10.6.1 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "When operating in the RCDS mode, ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| | | | Editorial | Missing reference. | Append: "and H.17.6.5" to references | |
| AU | H.10.6.2 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend first paragraph to read: In addition, ECDIS operating in RCDS mode shall record the complete track for the entire voyage, with time marks at intervals not exceeding 4 hours. (See H.17.6.5.) | Agreed |
| GB | H.10.6.2 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 87 | H.10.6.2 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| AU | H.10.6.4 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: ECDIS operating in RCDS mode shall have the capability to preserve the record of the previous 12 hours and of the voyage track. (See H.17.6.4.) | Agreed |
| GB | H.10.6.4 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted | | |
|-----------------------|----------------------|----------------------------|--|--|---|---|---|--|
| US 88 | H.10.6.4 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed | | |
| | | | Editorial | Correct reference. | Replace: " H.17.6.4" with "H.17.6.5b" | | | |
| AU | H.11.1 | | T | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. For consistency, the clarification statement should reflect the RCDS mode of operation. Clarifications regarding scale and accuracy should be included in a clarification statement rather than in the baseline text. | Amend first paragraph to read: The accuracy of all calculations performed by ECDIS operating in RCDS mode shall be independent of the characteristics of the output device and shall be consistent with the SRNC accuracy. (See H.17.3) amend clarification statement to read: The output device includes ECDIS display (operating in RCDS mode), stored memory, and/or printout. add clarification statement: The accuracy of all calculations shall be independent of the characteristics of the output device and shall be consistent with the scale of the SRNC. | Agreed - but appended "and scale" Agreed - but used modified wording "RCDS display" Rejected - but amended wording of clause text | | |
| GB | H.11.1 | | Technical | | Revert to intended IMO text. Amend IEC clarification to read "RCDS". Note. If the IMO text requires clarification, this should be done by an IEC clarification, not by amending the IMO text | Agreed | | |
| US 89 | H.11.1 | 1 1st para. | 1.1 1st para. | 1st para. Technic | 1st para. Technical | Restore most of original IMO wording with use of the term "ECDIS operating in the RCDS mode" for consistency. | Replace: "When operating in the RCDS mode, the accuracy of all calculations performed by ECDIS" with "The accuracy of all calculations performed by ECDIS operating in the RCDS mode" | Agreed - but used modified wording "RCDS display" |
| | | | Technical | Restore original IMO wording. | Replace: "scale of the SRNC" with "SRNC accuracy" | Rejected - but appended "and scale" | | |
| | | | Technical | Add IEC clarification for SRNC accuracy. | Add IEC clarification: "The accuracy of all calculations shall be independent of the characteristics of the output device and shall be consistent with the scale of the SRNC." | Rejected - but amended wording of clause text | | |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|--|--|--|
| US 90 | H.11.1 | 2nd para. | Technical | The term "ECDIS operating in the RCDS mode" provides consistency a variant is appropriate here. | Replace: "ECDIS display" with "ECDIS display (operating in the RCDS mode)" | Rejected - achieved by other means |
| AU | H.11.2 | | T | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. Clarifications regarding scale and accuracy should be included in a clarification statement rather than in the baseline text. | amend to read: Bearings and distances drawn on the display, or those measured between features already drawn on the display, shall have an accuracy no less than that afforded by the resolution of the display. (See H.17.3.) add clarification statement: Bearings and distances shall have an accuracy no less than that afforded by the resolution of the display. | Agreed - but with amended wording and without clarification as per clasue 4.11.2 |
| GB | H.11.2 | | Technical | | Revert to IMO wording. As with H.11.1, if the IMO text requires clarification, this should be done by an IEC clarification, not by amending the IMO text | Rejected - achieved by other means |
| US 91 | H.11.2 | | Technical | Restore original IMO wording. | Replace: " consistent with the resolution of the display but no more than that afforded by the scale of the SRNC" with "no less than that afforded by the resolution of the display" | Rejected - achieved by other means. See AU comment. |
| | | | Technical | Add IEC clarification for resolution of the display. | Add IEC clarification: "Bearings and distances shall have an accuracy no more than that afforded by the scale of the SRNC." | |
| AU | H.12.1 | | T | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: ECDIS operating in the RCDS mode shall not degrade the performance of any equipment providing sensor inputs. Nor shall the connection of optional equipment degrade the performance of ECDIS operating in RCDS mode below this standard. (See 6.2.)) | Agreed |
| GB | H.12.1 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 92 | H.12.1 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" (Note: there are two instances) | Agreed |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|---|---|---|---|
| AU | H.12.2 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: ECDIS operating in RCDS mode shall be connected to systems providing continuous position-fixing, heading and speed information. (See 6.2.) | Agreed |
| GB | H.12.2 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 93 | H.12.2 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| AU | H.13.1 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend first paragraph to read: ECDIS operating in RCDS mode shall be provided with means for carrying out onboard tests of major functions either automatically or manually. In case of a failure, the test shall display information to indicate which module is at fault. (See 6.8.17.) | Agreed |
| GB | H 13.1 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 94 | H.13.1 | | Technical Editorial | The term "ECDIS operating in the RCDS mode" provides consistency. Clarify references. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" Append: "a and b" to reference "6.8.17" | Agreed |
| AU | H.13.2 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: ECDIS operating in RCDS mode shall provide a suitable alarm or indication of system malfunction. (See 6.8.17.) | Agreed |
| GB | H13.2 | | Technical | | Revert to intended IMO text | Rejected - achieved by other means |
| US 95 | H.13.2 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency. | Replace: "ECDIS" with "ECDIS operating in the RCDS mode" | Agreed |
| | | | Editorial | Clarify reference. | Append: "c" to reference "6.8.17" | |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|---|--|--|
| AU | H.14 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: Adequate back-up arrangements shall be provided to ensure safe navigation in case of an ECDIS (operating in RCDS mode) failure. (See annex G.) | Rejected - See GB comment. |
| | | | | | .1 Facilities enabling a safe take- over of the ECDIS (operating in RCDS mode) functions shall be provided in order to ensure that an ECDIS (operating in RCDS mode) failure does not result in a critical situation. | |
| | | | | | .2 A back-up arrangement shall be provided facilitating means for safe navigation of the remaining part of the voyage in case of an ECDIS (operating in RCDS mode) failure. | |
| GB | H14 | | Technical | | Revert to intended IMO text | Agreed - but used IMO wording modified to "ECDIS failures" vs. "RCDS failures". Also changed clause title and added clarification. |
| US 96 | H.14.1 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency a variant is appropriate here. | Replace: "ECDIS" with "ECDIS (operating in the RCDS mode)" | Rejected - see GB comment on clause H.14 |
| US 97 | H.14.1 | .1 | Technical | The term "ECDIS operating in the RCDS mode" provides consistency a variant is appropriate here. | Replace: "ECDIS" with "ECDIS (operating in the RCDS mode)" (Note: there are two instances) | Rejected - see GB comment on clause H.14 |
| US 98 | H.14.1 | .2 | Technical | The term "ECDIS operating in the RCDS mode" provides consistency a variant is appropriate here. | Replace: "ECDIS" with "ECDIS (operating in the RCDS mode)" | Rejected - see GB comment on clause H.14 |
| GB | H.15 | | Technical | | Revert to intended IMO text | Agreed - but used IMO wording modified to "ECDIS failures" vs. "RCDS failures". Also changed clause title and added clarification. Also expunged clause H.17.6.6 as redundant with clause 6.9.6. |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|---|---|---|
| AU | H.15.1 | | Т | In order to maintain consistency with the original A.817 reference, propose incorporating the phrase nominated in Australia's General Comments above. | amend to read: It shall be possible to operate ECDIS (operating in RCDS mode) and all equipment necessary for its normal functioning when supplied by an emergency source of electrical power in accordance with the appropriate requirements of chapter II-1 of the 1974 SOLAS Convention. | Rejected - see GB comment |
| US 99 | H.15.1 | | Technical | The term "ECDIS operating in the RCDS mode" provides consistency a variant is appropriate here. | Replace: "ECDIS" with "ECDIS (operating in the RCDS mode)" | Rejected - see GB comment on clause H.15 |
| US 100 | H.15.2 | | Editorial | Correct reference. | Replace: "6.9.6" with "H.17.6.6" | Agreed |
| US 101 | H.16.1 | 1st para. | Editorial | Clause was extracted from IHO S-61 and should be italicised. | Italicise paragraph. | Agreed |
| US 102 | H.16.1 | 2nd para. | Editorial | Clause was extracted from IHO S-61 and should be italicised. "Should" should be "shall". | Italicise paragraph. Replace: "should" with "shall" (Note: "shall" should not be italicised) | Agreed |
| US 103 | H.16.2 | 1st para. | Editorial | Inappropriate reference. | Delete: " and H.17.4.4" The accuracy of the digital image file, as measured by the ability to determine the correct geographic coordinates of an individual pixel when the image file is used together with the RNC meta-data, shall allow a ship's position to be displayed at least as accurately as when using the original paper chart. (\$61/3.3.3) (See H.17.2.1.1a and H.17.3a) | Agreed Struck-through text entered in error. |
| US 104 | H.16.2 | 2nd para. | Editorial | Missing reference. | Append "and H.17.3a" to references | Agreed |
| US 105 | H.16.3 | | Editorial | Clarify reference. | Replace: "3.5.1" with " S61/3.5.1" | Agreed |
| US 106 | H.16.5 | | Technical | Correct grammatical error. | Replace: "would be" with "is" | Agreed |
| US 107 | H.17.1.1 | | Editorial | Paragraph is not a test, but rather test preparations. | Delete: "(H.4.1 / H.16.1)" | Agreed |
| US 108 | H.17.2.1 | | Editorial | Missing references. Inappropriate reference. | Insert: "H.3.1 / H.3.2.1 /" in references Insert: "H.4.1 / H.4.2" in references Delete: "H.17.4.2" from references | Agreed |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|--|--|--|
| US 109 | H.17.2.1.1 | | Editorial | Missing reference. Inappropriate reference. | Insert: "H.4.1 /" in references Delete: "H.10.5.12 /" from references | Agreed |
| US 110 | H.17.2.1.1 | b) | Technical | Existing test verbiage does not correspond to the original IMO requirement. | Replace: "quickly and easily" with "simply and quickly" (Note: there are two instances) | Agreed |
| US 111 | H.17.2.1.1 | | Editorial | Renumber sub clause. | (Note: there are two instances) Change: "H.17.2.1.1" to "H.17.2.2" (Note: Cross references for this subclause are located in subclauses H.4.1, H.9.5, H.16.2, H.16.5) | Agreed |
| US 112 | H.17.3 | | Editorial | Missing reference. | Append: "/ H.16.2" to references | Agreed |
| US 113 | H.17.3 | a) | Technical | Reference to test data set should be consistent. The test for rhumb line and great circle calculations is contained in | Replace: "RNC test data" with "RNC test data set" | Agreed |
| | | | | subparagraph b. | Delete: "rhumb line and great circle" | Rejected - deferred to a future version |
| US 114 | H.17.3 | b) | Editorial | Correct reference. | Replace: "annex J" with "annex I" | Agreed |
| US 115 | H.17.4.1 | | Editorial | Missing references | Insert: "H.3.8 / H.10.4.3 /" in references | Agreed |
| US 116 | H.17.4.1 | a) | Technical | Reference to test data set should be consistent. | Replace: "test data set" with "RNC test data set" | Agreed |
| US 117 | H.17.4.1 | b) | Technical | Renumber paragraph to allow insertion of two additional tests in sequence. | Change: "H.17.4.1 b)" to "H.17.1 d)" | Agreed |
| US 118 | H.17.4.1 | | Technical | Insert new test b). | Insert: "b) Check that the symbols for the navigational elements conform to the IHO presentation library" | Agreed in principal - however modified wording for conformance to Annex E vs. IHO presentation library |
| US 119 | H.17.4.1 | | Technical | Insert new test c). | Insert: "c) Perform zoom-in and zoom-out operations in each mode and check that the symbols for the navigational elements do not decrease in size below that shown in the IHO presentation library." | Agreed in principal - however deleted reference to IHO presentation library |
| US 120 | H.17.4.2 | | Editorial | No reference. | Append: "(H.3.2.1)" as reference | Agreed |
| | | | Technical | Add item for orientation (where appropriate). | Append: "n) orientation of north (where appropriate for the chart projection in use)." | Agreed - however used "indication" vs. "orientation" and without parenthetical (struck-through) |
| US 121 | H.17.4.3 | | Technical | Clarify the intended test results. | Append: "and give any results specified by the hydrographic office providing the data." | Rejected - color table in RNC meta-data already required |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ Technical/Editorial) | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|--|--|---|--|
| US 122 | H.17.4.4 | | Technical | Insert new test as first paragraph. | Insert: "Measure the displayed chart area while in route monitoring mode and check that it is at least 270 mm by 270 mm." | Agreed |
| US 123 | H.17.5.1 | | Editorial | Missing references. Inappropriate reference. | Insert: "H.3.2.2 / H.3.3 /" in references Insert: "H.3.10 / H.10.5.12" in references Delete: "H.10.4.7 from references | Agreed |
| US 124 | H.17.5.1 | | Technical | Add new test e). | Insert: "e) Remove all additional information. Verify that the EUT display is the same as the graphical representation of the RNC test data set." | Agreed |
| US 125 | H.17.5.1 | | Technical | Add new test f). | Insert: "f) Verify that the RCDS mode standard display can be restored by a single operator action." | Agreed |
| DE 15 | H 17.5.3 | 17.5.3 a) | | Question: Does an RNC exists which is not orientated "north up" and is this function covered by RNC test data set? | This paragraph should be deleted if no adequate test data will be provided within the RNC test data set. | Rejected - RNC do exis with other than north-up referencet |
| US 126 | H.17.5.4 | | Editorial | Missing reference. | Append: "/ H.10.5.12" to references | Agreed |
| US 127 | H.17.5.4 | | Technical | Insert new test as first paragraph. | Insert: "Enter the geographic coordinates of a position, and display that position." | Agreed |
| US 128 | H.17.5.5 | | Editorial | Inappropriate references. Inappropriate annex reference. | Delete: "4.10.5 / 4.10.5.11/ 4.11.2 / annex B" from references Insert "H.10.5.11" in references | Agreed |
| US 129 | H.17.5.6 | | Editorial | Missing references. | Insert: "/ H.10.5.6 / H.10.5.7 / H.10.5.9 / H.10.5.13" in references | Agreed |
| US 130 | H.17.5.6 | | Editorial | Add new test g). | Insert: "g) Verify that the manufacturer's documentation includes guidance for implementing a common reference system (offsets)." | Agreed - however expunged parenthetical |
| US 131 | H.17.5.7 | | Editorial | Missing reference. | Append: "H.6.3.5" to references. | Agreed |
| US 132 | H.17.5.9.1 | | Editorial | Missing reference. | Insert: "H.3.9 / " to references | Agreed |
| US 133 | H.17.5.9.2 | | Editorial | Missing reference. | Append: "/ H.4.5" to references | Agreed |

| National Committee | Clause/ Subclause | Paragraph Figure/ Table | Type of comment (General/ | COMMENTS | Proposed change | OBSERVATIONS OF THE SECRETARIAT on each comment submitted |
|-----------------------|----------------------|----------------------------|---------------------------|--|---|---|
| US 134 | H.17.5.9.3 | | Editorial | Inappropriate reference. | Delete: "/ H.4.8" from references | Agreed |
| | | | Editorial | Pluralize item d. | Replace: "update and update number" with "updates and update numbers" | |
| | | | Editorial | Correct item e for localization of item d. | Replace: "its application" with "their application" | |
| US 135 | H.17.5.10 | | Editorial | Missing reference. | Insert: "H.3.8 /" in references | Agreed |
| US 136 | H.17.5.10 | | Technical | Reference to test data set should be consistent. | Replace "test data subset as described in annex I" with "RNC test data set" | Agreed |
| US 137 | H.17.5.11 | | Editorial | Clarify references. | Replace: "H.13.1 / H.13.2" with "H.13" | Agreed |
| US 138 | H.17.6.1 | | Editorial | No reference. | Insert: "(H.10.2) as reference | Agreed |
| US 139 | H.17.6.1 | a) | Technical | Inappropriate reference. | Delete: "5.9 and" | Agreed |
| US 140 | H.17.6.2 | | Editorial | Missing references. | Insert: "H.3.11 /", "/ H.10.4.2" and "/ H.10.4.6" in references | Agreed |
| US 141 | H.17.6.2 | a) .4 | Editorial | Correct grammatical error. | Delete: ". Set " | Agreed |
| US 142 | H.17.6.2 | a) .10 | Technical | Consistent with suggested test data set definition and implementation. See proposed change to 3.1.17, H.3.8 and H.4.5. | Replace: "RNC service or services" with "government-authorized hydrographic office" | Rejected - but added a reference to clause H.17.1.1 |
| US 143 | H.17.6.2 | a) | Technical | Add test requirement to cross into an area covered by ENC data. | Append: ".11 the planned route shall enter an area where ENC data are available." | Rejected - deferred to a future edition |
| Japan | H.17.6.2 | b) | EDITORIAL | Observefor route planing, route | Observefor route planning, route | Agreed |
| US 144 | H.17.6.2 | e) | Editorial | Correct references. | Replace: "annex J" with "annex I" (Note: there are two instances) | Agreed |
| US 145 | H.17.6.2 | f) | Technical | Correct mistake. | Replace: "EUT mode" with "RCDS mode" | Agreed |
| US 146 | H.17.6.3 | | Editorial | Missing references. Inappropriate references. | Insert: "H.3.11 /" and "H.10.1" Delete: "H.9.2 /", "H.10.5.14" and "/ H.11.1" | Agreed |
| US 147 | H.17.6.3 | a) | Technical | Add test requirement to cross into an area covered by ENC data. | Append: ".8 at least one leg shall enter an area where ENC data are available and the "ENC available" indication would be triggered." | Rejected - deferred to a future edition |

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|-----------------------|----------------------|----------------------------|--|--|---|---|
| US 148 | H.17.6.3 | f) | Technical | Add test requirement to cross into an area covered by ENC data. | Append: ".8 simulate own ship's movement from an area covered by an RNC into an area where ENC data are available. Ensure that the EUT indicates that ENC data are available." | Rejected - deferred to a future edition |
| US 149 | H.17.6.3 | g) | Editorial | Correct mistake. | Replace: "EUT mode" with "RCDS mode" | Agreed |
| US 150 | H.17.6.4 | | Editorial | Inappropriate references. | Delete: "H.10.5.14 /" and "/ H.10.6.4" | Agreed |
| US 151 | H.17.6.5 | | Editorial | Inappropriate references. | Replace: "H.10.6.7 - 7.10.6.4" with "H.10.6.1 - H.10.6.4" | Agreed |
| US 152 | H.17.6.5 | a) | Editorial | Correct reference. | Replace: "4.10.6.1" with "H.10.6.1" | Agreed |
| US 153 | H.18 | | Technical | Consistent with suggested test data set definition and implementation. See proposed change to 3.1.17, H.3.8 and H.4.5. | Replace: "In development." with "Refer to the RNC test data set and any instructions prepared by the hydrographic offices originating the RNCs. These test data sets are available from the International Hydrographic Bureau." | consistent with clauses H.17.1.1 and |